

Type 1 Diabetes in Twitter: Who All Listen To?

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Abstract

Knowing what the conversation on Twitter regarding type 1 diabetes (T1D) is about can help in understanding the kind of information relevant to the individuals affected by the disease. The profile of Twitter users posting on T1D was collected and classified. The number of re-tweets was also registered. The tweets posted by non-governmental organizations (NGOs), communication media, and individuals affected by T1D had higher number of potential readers. More than a half of the tweets were posted by individuals affected by T1D, and their tweets were the most re-tweeted. The next most active users were NGOs and healthcare professionals. However, while tweets soliciting for research funds posted by the NGOs were the next most re-tweeted messages, tweets posted by healthcare professionals were the least re-tweeted. Twitter could be used more actively by healthcare professionals to disseminate correct information about T1D.

Keywords:

Type 1 Diabetes Mellitus; Social Media; Twitter Messaging.

Introduction

Prevalence studies estimate around 500,000 children aged under 15 years have type 1 diabetes (T1D) worldwide [1]. These children and their parents might be looking for information on the disease online, especially on social media, since it has become one of the first sources of information about health [2]. As other diseases, T1D is one of the widely discussed topics on social media.

The aim of this study is to describe the profile of Twitter users posting about T1D, and the potential relevance of the tweets, based on the number of re-tweets and followers.

Materials and Methods

In December 2014, we searched Twitter to sample in total 300 random tweets containing the hashtags #type1diabetes, #t1d, or #type1. Information regarding the tweets emitters, as well as the number of re-tweets were collected. The tweet emitters were classified into six categories: individuals affected by T1D (either patients or parents of children with T1D); healthcare professionals; non-governmental organizations (NGOs); information websites; journalists or communication media; and private companies.

Results

The 300 downloaded tweets on T1D were potentially read by 549,676 readers, according to the number of followers of the

emitters at the moment the tweets were posted. Tweets posted by NGOs, communication media and individuals affected by T1D had higher number of potential readers: 210,086; 122,232; and 90,084 respectively.

Most of the tweets from individuals affected by T1D were personal experiences or recommendations; while tweets from NGO solicited funds for research. Details on the number of tweets per type of emitter, as well as the frequency of re-tweeted messages are summarized in Table 1.

Table 1 – Tweets and re-tweets by user profile

Tweet emitter nature	Tweets on	
	T1D	Re-tweets
Individuals affected by T1D	160 (53.3%)	241 (47.8%)
Non-governmental organizations	37 (12.3%)	139 (27.6%)
Healthcare professionals	36 (12.0%)	14 (2.8%)
Private companies	32 (10.7%)	46 (9.1%)
Communication media	19 (6.3%)	36 (7.1%)
Information site	16 (5.3%)	28 (5.6%)
TOTAL	300 (100%)	504 (100%)

Conclusion

Individuals affected by T1D are the main group of Twitter users posting about the disease. The personal experiences and recommendations shared by individuals affected by T1D seems to be the most interesting topic for other Twitter users. The next most active users were NGOs and healthcare professionals. However, while tweets posted by NGOs soliciting research funds were the next most re-tweeted messages, tweets posted by healthcare professionals were the least re-tweeted. Twitter could be used more actively by healthcare professionals to disseminate correct information about T1D.

References

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